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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,239	10/15/2001	Victor V. Mashayekhi	016295.0682	4100

7590

11/23/2004

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EXAMINER

MCCARTHY, CHRISTOPHER S

ART UNIT

PAPER NUMBER

2113

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/978,239	Applicant(s) MASHAYEKHI ET AL.	
	Examiner Christopher S. McCarthy	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7,8 and 14-20 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>response to arguments</u> .            |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu U.S. Patent 5,764,903 in view of Chrabaszcz U.S Patent Application Publication US2001/0056554.

As per claim 1, Yu teaches a method for updating the content of a set of data accessible by a server of a cluster system, comprising the steps of providing first and second servers (column 2, lines 5-15); providing a network controller associated with each server, each network controller including a local power source and a local memory (column 3, lines 41-46, 62-64; column 4, lines 17-25); storing in the local memory of each network controller a copy of a set of data (column 1, lines 5-7; column 2, lines 30-35); and performing a write operation to the memory of each network controller such that the content of the set of data of each network controller is the same (column 4, lines 50-65). Yu does not explicitly teach wherein the local source comprises a standby power source operable to provide power to local memory and a processor of the network controller in the event of a power failure in the network controller. Chrabaszcz does teach wherein the local source comprises a standby power source operable to provide power to local memory and a processor of the network controller in the event of a power

Art Unit: 2113

failure in the network controller (paragraph 0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the standby power source of Chrabaszcz in the server system of Yu. One of ordinary skill in the art would have been motivated to use the standby power source of Chrabaszcz in the server system of Yu because Chrabaszcz teaches wherein the use of the standby power source in a server is a commonly used method for fault tolerance in a server system and prevents network downtime, a desire explicitly taught in Yu (column 1, lines 35-37).

As per claim 2, Yu teaches the method for updating the content of a set of data accessible by a server of a cluster system of claim 1, wherein the first and second servers are geographically separate from one another (column 3, lines 21-22; column 1, lines 27-29).

As per claim 3, Yu teaches the method for updating the content of a set of data accessible by a server of a cluster system of claim 1, wherein the set of data includes the metadata of the cluster system (column 3, lines 27-30; column 4, lines 17-30).

As per claim 4, Yu teaches the method for updating the content of a set of data accessible by a server of a cluster system of claim 1, wherein the step of performing a write operation includes the step of transmitting an acknowledge signal to the other server following the completion of a successful write operation by a server (column 6, lines 42-50).

As per claim 5, Yu teaches the method for updating the content of a set of data accessible by a server of a cluster system of claim 4, wherein the write operation is atomic such that the results of the write operation are discarded in the event that an acknowledge signal is not received by each server (column 6, lines 42-50).

As per claim 6, Yu teaches the method for updating the content of a set of data accessible by a server of a cluster system of claim 1, wherein each network controller includes a local operating system for controlling communication between the network controllers (column 2, lines 13-15; column 4, line 66 – column 5, line1).

As per claim 9, Yu teaches a cluster system, comprising: a first server including a network controller; a second server including a network controller (column 2, lines 5-15; column 3, lines 41-46; column 4, lines 17-25); wherein the network controllers of the first and second servers each include a copy of a set of data describing the status of the cluster system (column 1, lines 507; column 2, lines 30-35; column 3, lines 41-46, 62-64; column 4, lines 17-25; figure 1). Yu does not explicitly teach wherein the network controllers are coupled to a standby power source operable to provide standby power to the network controller such that the set of data is accessible despite the loss of operational power in the associated server. Chrabaszcz does teach wherein the network controllers are coupled to a standby power source operable to provide standby power to the network controller such that the set of data is accessible despite the loss of operational power in the associated server (paragraph 0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the standby power source of Chrabaszcz in the server system of Yu. One of ordinary skill in the art would have been motivated to use the standby power source of Chrabaszcz in the server system of Yu because Chrabaszcz teaches wherein the use of the standby power source in a server is a commonly used method for fault tolerance in a server system and prevents network downtime, a desire explicitly taught in Yu (column 1, lines 35-37).

Art Unit: 2113

As per claim 10, Yu teaches the cluster of claim 9, wherein the first server and the second server are geographically separate from one another (column 3, lines 21-22; column 1, lines 27-29).

As per claim 11, Yu teaches the cluster of claim 9, wherein each network controller includes a local operating system for controlling communication between the network controllers (column 2, lines 13-15; column 4, line 66 – column 5, line 1).

As per claim 12, Yu teaches the cluster of claim 9, wherein the set of data is the metadata of the cluster system (column 3, lines 27-30; column 4, lines 17-30).

As per claim 13, Yu teaches the cluster of claim 9, wherein the first server and the second server are geographically separate from one another (column 3, lines 21-22; column 1, lines 27-29); wherein each network controller includes a local operating system for controlling communication between the network controllers (column 2, lines 13-15; column 4, line 66 – column 5, line 1); and wherein the set of data is the metadata of the cluster system (column 3, lines 27-30; column 4, lines 17-30).

***Allowable Subject Matter***

3. Claims 7-8, and 14-20 are allowed.

***Response to Arguments***

4. Applicant's arguments filed 9/29/2004 have been fully considered but they are not persuasive.

Applicant argues that Yu does not teach the network controller to have a local power source. The examiner respectfully disagrees. A server or network controller must inherently run off a power source. As for the limitation of a local power source, the rejected limitations stand.

Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection. The amended limitation of a standby power source is addressed in this action.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

Art Unit: 2113

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

csn  
November 18, 2004

  
ROBERT BEAUSOLIEL  
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